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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,054

Applicant(s)

SONG, ANDY ZHENG

Examiner

ECE HUR

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 07/14/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

This action is responsive to application filed on May 11, 2006 and IDS filed on July 14, 2006, in which Claims 1-28 are presented for examination. This application is a new PCT National Stage application of PCT/AU04/01565 that was filed on November 12, 2004. Applicant is claiming foreign priority for the application New Zealand 529518 filed on November 13, 2003.

Status of Claims

Claims 1-28 are pending in the case. Claims 1, 8, 17, 22, and 24 are the independent Claims.

Claims 21, 27 and 28 are rejected under 35 U.S.C. 112, second paragraph.

Claims 1-28 are rejected under 35 U.S.C. 101.

Claims 1-3, 5, 8-10, 13-18, 21-23 are rejected under 35 U.S.C. 102(e).

Claims 4, 6, 7, 11, 12, 19, 20, 24-28 are rejected under 35 U.S.C. 103(a).

Information Disclosure Statement Acknowledgement

The information disclosure statement filed on July 14, 2006 is in compliance with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been placed in the application file, the information referred to therein has been considered as to the merits.

Priority Acknowledgement

Acknowledgment is made of applicant's Claim for foreign priority under 35 U.S.C. 119(a)-(d). Receipt is acknowledged of certified copy of New Zealand 529518 filed on November 13, 2003 submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Abstract Objection

The abstract of the disclosure is objected to because the Abstract includes legal phraseology often used in patent Claims, "means", should be avoided.

Appropriate correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent Claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Drawing Objection

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: sensing LCD layer 17, circuit board 13, keyboard layout 11, image 7, finger 6 and FIG. 2 is not labeled as FIG. 2. FIG. 9-11 do not have any labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more Claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 21, 27 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being failing to particularly point out and distinctly Claim the subject matter which applicant regards as the invention, because the Claims recites "and/or".

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22 and 23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically directed towards Software program per se.

Regarding Claims 22 and 23, Claims 22 and 23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter and Claiming "Software" per se. Software is functional descriptive material that can be considered statutory only if it is both functional and clearly embodied on a computer readable medium and designed to support specific data manipulation function. When functional descriptive material is recorded on a computer-readable medium it will become structurally and functionally interrelated the medium and will be statutory in most cases since the use of technology permits the function of the descriptive material to be realized. See In re Lowry, 32 F.3D 1579, 32 USPQ2d 1031, 1035 (Fed. Cir 1994) and

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Warmerdam, 33 F.3d at 1360-61, 31 USPQd at 1759. A Software structure is functional if the specific arrangement of data enables a computer to accomplish useful result arising from the arrangement of the data in the software. However, only computer readable medium executed instruction by a processor could be statutory, it is not clearly defined as being embodied in a computer readable medium as executed instruction and is therefore not statutory. See Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759.

Claims 24-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically directed towards data descriptive material, "a knowledge database", per se.

Regarding Claims 24-28 are directed towards a data structure. A data structure is descriptive material that can be considered statutory only if it is both functional and clearly embodied on a computer readable medium and meets the IEEE definition for data structure (a physical or logical relationship among data elements, designed to support specific data manipulation function) (See MPEP 2106). When functional descriptive material is recorded on some computer-readable medium it will become structurally and functionally interrelated the medium and will be statutory in most cases since the use of technology permits the function of the descriptive material to be realized. See *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031, 1035 (Fed. Cir 1994) and Warmerdam, 33 F.3d at 1360-61, 31 USPQd at 1759. A data structure is functional if the specific

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arrangement of data in data enables a computer to accomplish some useful result arising from the arrangement of the data the data structure. However, even if the data structure of Claims 1-38 is functional, it is not clearly defined as being embodied in a computer readable medium and is therefore not statutory. See Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759.

Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically directed towards signal, "instruction signal", per se.

Regarding Claims 1-28, applicant is referring to "instruction signal", signal per se fails to fall within a statutory category. Signal is a form of energy, therefore it is directed to non-statutory subject matter. A signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter. It is noted in the MPEP that a product is a tangible physical article or object, which a signal is not. Thus a signal does not fall within one of the four classes of 35 U.S.C. 101. Therefore Claims 1-28 are non-statutory.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 8-10, 13-18, 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Oross, US Patent 6,757,002.

Regarding Claim 1, Oross in 6,757,002 discloses the claimed aspect of entering input into a computing system including detecting input movements by means of a panel including an array of sensors in FIG. 1B, wherein the position detection device 16 is a digitizer of the resistive-type or capacitive type, and includes one or more active layers 20 that sense finger position. (Oross, Column 4, lines 19-21).

Oross discloses the claimed aspect of processing the detected input movements by consulting a knowledge database to identify a corresponding instruction signal for each detected input movement in FIG. 15, wherein a touch pad with different specialized areas and functions are illustrated, an exemplary touchpad configuration screen on a computing system in which the operator can programmably select the manner each specialized area is to respond. In this exemplary screen, the operator selects the specialized area of interest on the touchpad and then selects one of the functions (manner) under the browser, cursor, or edit categories. Other dedicated manners or functions are possible

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besides those shown in this exemplary configuration screen. Once the operator has programmed the desired specialized areas, the configuration is saved when the operator selects the "done" box. (Oross, Column 11, lines 25-35).

Furthermore, there is a relation established between the area and assigned function to that area. Applicant should duly note that Oross discloses a look up table which is a relational database.

Oross discloses the claimed aspect of transmitting the instruction signal to the computing system in FIG. 1B, in response to the detected finger placement on the detection device 16 at a given time, the controller 22 sends control commands to a host computing device 12 through an interface 28. (Oross, Column 4, lines 42-45).

Regarding Claim 2, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Oross discloses the claimed aspect of processing step involves using a hierarchical control structure including comprising one or more sub processes to be invoked by a main process in response to a particular type of detected input movement such that the sub process can associate each detected input movement with an appropriate instruction signal, wherein in FIG. 13 when an operator touches an active track pad apparatus 12, at step 94 a determination is made as to whether it was the main touch area 34. If so, then at step 96, the sensed position is processed in a first manner, (e.g., 'normal'). If the area touched was not the main touch sense area 34 then at step 98 a determination is made as to whether the specialized

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functions are enabled. If not enabled, then the response depends on the embodiment. If the specialized touch sense areas are to function like the main touch sense area, then step 96 is performed--the sensed position is processed in the first manner. Alternatively, the touch sensing is ignored at step 100. (Oross, Column 10, lines 47-58).

Regarding Claim 3, most of the limitations have been met in the rejection of Claim 2. See details for Claim 2 rejection. Oross, discloses the claimed aspect of a particular input movements are associated with operation of the panel in any one or more of the following modes: keyboard modes, mouse modes, (c) scripting modes, (d) device modes, (e) customer modes and (f) idle mode, wherein any key combination, mouse clicking combination, key and clicking combination, or even a macro may be programmed to correspond to position or motion detection within an associated programmable, special touch sensing area 36, 38. For example, a utility program (see FIG. 15) may be implemented with the device driver to allow the operator to associate a programmable special touch sensing area to a program launch operation, to a user defined menu of buttons, to a sequence of keys and clicks, to any of the keyboard function keys or other keyboard keys, to any of the keypad keys (e.g., cursor arrow keys, insert, delete, home, end, page up, page down), any of the menu commands in any of the application programs. (Oross, Column 7, lines 43-56). Furthermore, Oross discloses the track pad is integrated into a keyboard or is integrated into a

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notebook computer case in the vicinity of the keyboard it is common for a user to inadvertently brush the touch sensitive track pad while typing at the keyboard. This causes the on-screen cursor to be moved in the midst of typing, and can become a frustration to the user. Accordingly, an on-off button 33 is provided adjacent to the track pad surface (see FIG. 2). The user readily turns the track pad on and off as needed. While the button 33 is on the off position, the track pad does not send control signals to the computer. Thus, when the operator brushes over the track pad surface 26 the cursor 14 is not inadvertently relocated. When the button 33 is in the on position the track pad 10 functions to sense operator touch and route signals to the computer 12 for control of the on-screen cursor 14. In some embodiments, a light emitting diode 35 or another visual indicator is included in the vicinity of the on-off button 33 to identify the status of the on-off button 33. In other embodiments the button position identifies the on-off status. (Oross, Column 5, lines 20-39).

Regarding Claim 5, most of the limitations have been met in the rejection of Claim 2. See details for Claim 2 rejection. Oross discloses the claimed aspect of a sub process Claims a region of the panel thereby causing all input movements received via the region to be processed by that sub process in FIG.2, wherein the specialized functions pertain to dedicated or programmed functions responsive to detection of touch within special touch sensing areas 36, 38 (see FIG. 2 and description below). When on, such functions are active. (Oross, Column 5, lines

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41-45). Furthermore, in FIG. 13 main touch sensed area and special functions are illustrated.

Regarding Claim 8, Oross discloses the claimed aspect of an input system, wherein a system which implements the method includes a main touch area capable of sensing position, and at least one specialized touch area capable of sensing position. The main touch sensing area is capable of generating commands indicative of position in the first manner. The at least one specialized touch area is capable of generating commands indicative of position in the second manner. (Oross, Column 2, lines 1-7). The rejection of Claim 1 applies to Claim 8. See Claim 8 rejection details.

Regarding Claim 9, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. The rejection for Claim 2 applies to Claim 9.

Regarding Claim 10, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. The rejection of Claim 3 applies to Claim 10.

Regarding Claims 13 and 14, most of the limitations have been met in the rejection of Claim 9. See details for Claim 9 rejection. Oross discloses the claimed aspect of the input movements detected are the movements of one or

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more user fingers and input movements detected are the movements of the movement indicating device, the movement of which across the surface of the panel indicates an instruction signal to move in the direction indicated with the movement indicating device in FIG. 1B, wherein operator moves a finger in a direction 30, a cursor 14 on a display screen 32 of the host computing apparatus 12 is moved in a corresponding direction 37. The magnitude and speed of the motion 34 is determined by the executed program or user-selectable parameters accessed by the executed program. In an alternative embodiment, cursor control commands are generated directly by the track pad apparatus 10. (Oross, Column 5, lines 10-17).

Regarding Claims 15 and 16, most of the limitations have been met in the rejection of Claim 14. See details for Claim 14 rejection. Oross discloses the claimed aspect of an application of pressure to the movement indicating device causes an input movement which is interpreted by the processor as indicating an instruction signal to move downwards, and reducing the pressure applied to the movement indicating device causes an input movement which is interpreted by the processor as indicating an instruction signal to move upwards and amount of pressure being applied to the movement indicating device is detected by reference to the size of an area of contact between the fingers or movement indicating device and the surface of the panel, or by reference to change in size of an area of contact between the fingers or movement indicating device and the surface of the panel, wherein the track pad include detecting specific movement

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patterns and finger combinations. For example, it is known to detect a tapping to emulate the clicking or double-clicking of a mouse button. It also is known to detect an end of surface position and translate such position to mean continue moving the cursor in the same direction. Further, it is known to detect multiple fingers, where one finger is used to control cursor movement and the second finger is used to correspond to a mouse button. For example, the two-finger combination may be used to implement a drag and drop function (i.e., the dragging of an icon or other selected display item(s) to another area of the screen where they are dropped/relocated). In addition, it is known to combine a motion pattern on a track pad with a clicking of an adjacent clicking device to perform the drag and drop function. (Oross, Column 1, lines 34-49). Applicant should duly note that performing mouse function by tapping creates different pressure than just moving the cursor.

Furthermore, Oross discloses in FIG.14 that a specialized touch sensing area is dedicated to correspond to a window scrolling function. (Oross, Column 3, lines 43-45).

Regarding Claim 17, Oross discloses the claimed aspect of an input device for use with a computing system, the input device in FIG.2, FIG.9 and FIG.10. The rejection for Claims 1 and 8 apply to Claim 17. See the rejection details for Claims 1 and 8.

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Regarding Claim 18, most of the limitations have been met in the rejection of Claim 17. See details for Claim 17 rejection. The rejection for Claims 3 and 10 applies to Claim 18. See the rejection details for Claims 3 and 10.

Regarding Claim 21, most of the limitations have been met in the rejection of Claim 17. See details for Claim 17 rejection. The rejection for Claim 13 applies to Claim 21. See the rejection details for Claim 13.

Regarding Claim 22, Oross discloses the claimed aspect of FIG.1B, wherein an interface 28 and computer software. The rejection for Claim 1 applies to Claim 22. See the rejection details for Claim 1.

Regarding Claim 23, most of the limitations have been met in the rejection of Claim 22. See details for Claim 22 rejection. The rejection for Claim 2 applies to Claim 23. See the rejection details for Claim 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oross, US 6,633,865 B1, in view of Geaghan et al., US 20030063073 A1.

Regarding Claims 4, 6 and 7, most of the limitations have been met in the rejection of Claims 2, 5. See details for Claim 2 rejection. Oross does not specifically teach the claimed aspect of main process assigns a priority value to each sub process invoked via a registration process thereby ensuring that a sub process having a minor priority value does not impede a sub process having a major priority value, However, Geaghan in US 20030063073 achieves the claimed aspect of main process assigns a priority value to each sub process invoked via a registration process thereby ensuring that a sub process having a minor priority value does not impede a sub process having a major priority value, wherein a touch panel systems and methods are disclosed that can temporally overlapping touch inputs from single touch inputs so that valid touch position coordinates can be determined. Touch panel systems and methods of the present invention can distinguish overlapping touches by comparing signal magnitudes to specified thresholds, by comparing the rates of change of signal magnitudes or measured positions to determined parameters, by locating the proximity a calculated location to icons or other such active areas, and the like. Because touch panel systems and methods of the present invention can discriminate single touches from double touches, they can be used in multiple user applications such as multiplayer games as well as in applications that may be subject to rapidly successive or overlapping touch inputs. (Geaghan, See

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Abstract). Applicant should duly note that priority is based on Geaghan's method and system on by locating the proximity a calculated location to icons or other such active areas.

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Oross's touch panel with Geaghan's distinguishing overlapping touches, because in user applications such as games rapid successive or overlapping touch inputs could be distinguish.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oross, US 6,633,865 B1, in view of Umeya et al., US 6,028,581.

Regarding Claims 11 and 12, most of the limitations have been met in the rejection of Claim 9. See details for Claim 9 rejection. Oross does not teach specifically the claimed aspect of sensors for detecting input movements are complementary metal oxide semiconductor sensors and light detecting aspect. However, Umeya discloses the claimed aspect of sensors for detecting input movements are complementary metal oxide semiconductor sensors and light detecting aspect in FIG.7, wherein second transistor is a TFT switch that forms part of a metal-oxide semiconductor (MOS) image sensor array including a photo diode and a micro lens. The second transistor causes an input to be sensed by the LCD. The inputs sensed by the LCD include image inputs and inputs from a

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pen and a human touch. The first and second transistors are fabricated on the same side of the same substrate. (Umeya, See Abstract).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Oross's touch panel input with Umay's metal-oxide semiconductor to capture image. The motivation to combine Oross's touch panel input with Umay's metal-oxide semiconductor to capture image would be the built-in self-scan feature of the ASR image sensor which requires no external shift register. Another advantage would be MOS processing is used which should enable image sensors to be made at less cost. A third possible advantage is that the MOS ASR image sensor can operate at lower light levels than conventional bipolar image sensors. Applicant should duly note that Metal-oxide semiconductor sensors are using light to detect movements.

Regarding Claim 19, most of the limitations have been met in the rejection of Claim 17. See details for Claim 17 rejection. The rejection for Claim 11 applies to Claim 19. See the rejection details for Claim 11.

Regarding Claim 20, most of the limitations have been met in the rejection of Claim 17. See details for Claim 17 rejection. The rejection for Claim 12 applies to Claim 20. See the rejection details for Claim 12.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oross, US 6,633,865 B1, in view of Geaghan et al., US 20030063073 A1.

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Regarding Claim 24, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. Oross discloses the claimed aspect of a knowledge database for use in conjunction with an input system according to Claim 8, the knowledge database storing information relating to different modes of operation of the input system, different movements which can be detected by the input system, corresponding signals associated with the different detectable movements in different modes of operation of the input system, and how to manage computing resources in FIG. 15 and FIG. 1B, wherein functions are assigned to certain areas and there is a relation between the area and the function.

Oross does not specifically discloses the claimed aspect of assigning priorities to sub processes, However Geaghan discloses the claimed aspect of assigning priorities to sub processes, wherein a touch panel systems and methods are disclosed that can temporally overlapping touch inputs from single touch inputs so that valid touch position coordinates can be determined. Touch panel systems and methods of the present invention can distinguish overlapping touches by comparing signal magnitudes to specified thresholds, by comparing the rates of change of signal magnitudes or measured positions to determined parameters, by locating the proximity a calculated location to icons or other such active areas, and the like. Because touch panel systems and methods of the present invention can discriminate single touches from double touches, they can be used in multiple user applications such as multiplayer games as well as in applications that may be subject to rapidly successive or overlapping touch

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inputs. (Geaghan, See Abstract). Applicant should duly note that priority is based on Geaghan's method and system on by locating the proximity a calculated location to icons or other such active areas.

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Oross's touch panel with Geaghan's distinguishing overlapping touches, because in user applications such as games rapid successive or overlapping touch inputs could be distinguish based on certain criteria. Applicant should duly note that assigning priorities to sub processes is obvious to one of ordinary skill in the art at the time of the invention.

Regarding Claim 25, most of the limitations have been met in the rejection of Claim 24. See details for Claim 24 rejection. Oross achieves the claimed aspect of knowledge database is dynamic, allowing an operator to change or redefine the database to fit individual circumstances in FIG. 15, wherein functions are assigned to certain areas and there is a relation between the area and the function.

Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oross, US 6,633,865 B1, in view of Geaghan et al., US 20030063073 A1 and in further view of Liao, US 6,633,865.

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Regarding Claims 26, 27 and 28, most of the limitations have been met in the rejection of Claim 24. See details for Claim 24 rejection. Oross and Geaghan do not teach the claimed aspect of a knowledge database interacts with external applications and can be modified externally by host computing system, independent application software and external devices and customized according to user's need, However, Liao in US 6,633,865 discloses the claimed aspect of a knowledge database interacts with external applications and can be modified externally by host computing system, independent application software and external devices and customized according to user's need, wherein an apparatus for executing a multiple step database lookup procedure, the apparatus including a plurality of processing units, at least two processing units being coupled to a memory containing a database to be looked up, and a plurality of data pipelines which couple the plurality of processing units to each other and to external apparatus, wherein each processing unit executes at least one step in the multiple step database lookup procedure. (Liao, See Abstract).

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Oross's touch panel and Geaghan's touch panel overlap concept with Liao's external database system, because it would allow other users to share the relational data. Applicant should duly note that database customization is well known in the art at the time of the invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Slater, et al., US 4,413,314, 11/01/1983, "Industrial process control system", touch-responsive panel that overlies the CRT display screen, execute command sequence for entering high priority commands into the system.
- 2) Allen, et al., US 6,239,389, 05/29/2001, "Object position detection system and method".
- 3) GILLESPIE, DAVID W. et al., US 20020093491, 07/18/2002, "OBJECT POSITION DETECTOR WITH EDGE MOTION FEATURE AND GESTURE RECOGNITION".
- 4) Zadesky, Stephen Paul, et al., US 20030076306 A1, 04/24/2003, "Touch pad handheld device".
- 5) Geaghan, Bernard O. et al., US 20040140993 A1, 07/22/2004, "Touch simulation system and method".
- 6) Cok, US 7,042,444, 05/09/2006, "OLED display and touch screen".
- 7) Geaghan, et al., US 7,254,775, 08/07/2007, "Touch panel system and method for distinguishing multiple touch inputs".
- 8) Yujin Tsukada, April 20-25, 2002, Layered Touch Panel: The Input Device with Two Touch Panel Layers, Pages 584-585.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ECE HUR whose telephone number is 571 270-1972. The examiner can normally be reached on MONDAY-THURSDAY 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FRANTZ COBY can be reached on (571) 272-4017. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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October 9, 2007


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